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AIR POWER AND ITS ROLE IN THE BATTLES OF KHE SANH AND DIEN BIEN PHU

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The battles of Dienbienphu and Khe Sanh have many similarities. Both were fought in Vietnam on similar terrain. Both were at the end of long supply lines in isolated jungle areas. Both involved a protracted siege of the defending forces whose success or failure was dependent on their ability to resupply by air and provide close air support against the attacking enemy formations. Yet one force, the French were defeated by a seemingly lightly armed guerrilla force, while the American Marines, opposed by the regular army forces of the North Vietnamese Army, were successful. Furthermore, the level of casualties on both sides were astonishing. At Dienbienphu, the French suffered over 12,350 total casualties as well as having 6,500 taken prisoner at the end of the battle, many of which were never heard from again. The Americans on the other hand suffered comparatively light casualties. 354 battle deaths and 2024 wounded were suffered during the fourteen months of combat operations beginning in April 1967 and ending in June 1968. The primary reason for the American success and the French failure during these two battles was their ability to conduct aerial resupply of the garrison and the hilltop outposts at Khe Sanh and the French inability to provide the necessary materials for their garrison. In addition to aerial resupply, was the American?s ability to provide close air support for their positions during the siege as well as fly interdiction missions along the NVA supply lines to slow down or reduce the amount of supplies and troops available for their assaults.

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Preface

The following research paper was inspired by my desire to learn more about the French defeat at Dienbienphu. During the course of my research, it became obvious, that their loss was not a military fluke or upset, but a result from several bad assumptions, the primary one being their ability to resupply the garrison with air assets only. At the same time, the Marines, seemingly making the same assumptions were successful in defeating the siege at Khe Sanh. Their victory was also not a fluke or military upset. There are no new revelations in this paper. All research used were primary and secondary sources. Time and resources did not permit gathering or conducting interviews with veterans of either battle.

During the course of my research, I received tremendous assistance from the librarians and technicians in the Historical Research Agency and the Air University Library. Additionally, research and academic guidance was provided by my Faculty Research Advisor, Major Arthur Connor, U.S. Army for which I am grateful.

Abstract

The battles of Dienbienphu and Khe Sanh have many similarities. Both were fought in Vietnam on similar terrain. Both were at the end of long supply lines in isolated jungle areas. Both involved a protracted siege of the defending forces whose success or failure was dependent on their ability to resupply by air and provide close air support against the attacking enemy formations. Yet one force, the French were defeated by a seemingly lightly armed guerrilla force, while the American Marines, opposed by the regular army forces of the North Vietnamese Army, were successful. Furthermore, the level of casualties on both sides were astonishing. At Dienbienphu, the French suffered over 12,350 total casualties as well as having 6,500 taken prisoner at the end of the battle, many of which were never heard from again. The Americans on the other hand suffered comparatively light casualties. 354 battle deaths and 2024 wounded were suffered during the fourteen months of combat operations beginning in April 1967 and ending in June 1968. The primary reason for the American success and the French failure during these two battles was their ability to conduct aerial resupply of the garrison and the hilltop outposts at Khe Sanh and the French inability to provide the necessary materials for their garrison. In addition to aerial resupply, was the American's ability to provide close air support for their positions during the siege as well as fly interdiction missions along the NVA supply lines to slow down or reduce the amount of supplies and troops available for their assaults.

Figure 1. South East Asia

Chapter 1

Introduction

> *Despite the superior American air power and other differences, the struggle for Khe Sanh inevitably raised parallels to the disastrous Battle of Dienbienphu.*
>
> —Guenter Lewy
> *America in Vietnam*

On May 8, 1954, the remnants of the French garrison at Dienbienphu surrendered to the Vietminh after a fifty-six day siege. The garrison, manned by some of France's most historied units and combat experienced veterans succumbed to a comparatively lightly armed guerrilla force. Their defeat was the capstone event in the First Indochina war, forcing the French to seek a political settlement. Nearly fourteen years later, a similar force of Marines were put under siege in the combat base of Khe Sanh. They, too were cut off and could only be reached by air for resupply and support. The Marines succeeded in holding their base where the French did not. Was it because the Marines were better trained or better led? Or was it because the Marines were just better soldiers? In fact, research of this question shows that it was neither. The primary reason the Marines succeeded where the French did not, was that they had overwhelming air support available to them. Furthermore the Marines, learning from the example of Dienbienphu, did not repeat many of the same French tactical errors that led to their defeat in 1954. Early decisions to seize dominant terrain in the region, conduct aggressive patrols to keep from

being surprised, and to keep the air bridge open during all weather also contributed to their success.

Chapter 2

Dienbienphu

An over-dependence on air support and supply can lead to disaster during a guerrilla-type campaign in difficult terrain or adverse weather conditions. Despite warnings from their own air force generals, the French High Command proceeded to install a major fortress in an isolated mountain region that would have to be supplied and reinforced by air over long distances.

—Howard R Simpson
Dien Bien Phu: The Epic Battle America Forgot

Geography

Dienbienphu, is a small crossroads village in the northwestern corner of what is today Vietnam. It lies approximately 300 kilometers due west from Hanoi and roughly 160 kilometers east from the present day border of Laos. The village was in a valley approximately 16 km long by 9 km wide. The valley was bisected by the Nam Yum River and Provincial Route 41. In the center of the valley was an airstrip built by the French to assist in interdicting infiltration from Laos and China. The valley was surrounded by a ring of hills reaching the 1000 meter level with the village of Dienbienphu several kilometers south of the airstrip. Within the valley itself, there were several rises or small hills on either side of the airstrip, and the vegetation in the valley fluctuated between elephant grass and rice paddies. The vegetation turned to single then double canopy jungle as you left the valley floor and started climbing the ridge lines surrounding the valley.[1]

The valley was subject to the same tropical weather patterns that plagued the rest of Vietnam. Winters were mild followed by a truncated spring and a monsoon season that lasted until mid June. Summer followed the monsoon with average temperatures in the 90's with very high humidity. The summer heat made even slight physical activity tiring, and made combat patrolling in the jungle near exhausting. The most significant weather feature of the region after the monsoon rains was the ceiling and fog conditions. Routinely the fog would obscure the valley floor from observation from the air and would not burn off until mid morning.[2] Additionally, low ceilings between Hanoi and Dienbienphu would also limit air support to the garrison. Overall, the weather conditions favored the Vietminh because they did not have to rely on supplies delivered by air.

French Colonial Forces

At the time of the battle, the whole area was known as Indochina, and had been under French colonial rule from early in the century. At the end of World War II, the French attempted to reestablish their colonial rule in the region. Ho Chi Minh, who fought against the Japanese with American arms and aid during the war, resisted the French and called for a free and independent Vietnam. Supported by the Communist Chinese with equipment and training, Ho Chi Minh and his forces had been fighting the French since 1946. The French government, tired of the long drawn out war with no end in sight, sent General Henri Navarre to Hanoi as the Commander of all Indochina operations with the vague mission of creating the conditions for an honorable solution.[3]

General Navarre was known for his aggressive nature. By July, he had instilled his offensive attitude into French operations in Indochina. On 17 July 1953, he dispatched

three parachute battalions to the border town of Lang Son, where they found and destroyed a large stock of Chinese arms and munitions. After the raid, the French paras withdrew and the operation was heralded as the perfect example of offensive operations in Indochina.[4]

While the Lang Son operation was deemed a success, Navarre continued to look for ways to draw the Vietminh into a prolonged conventional battle. The plan chosen was OPERATION CASTOR:

> a bold but ill-conceived plan. They [the French] established a strongly fortified position at Dienbienphu, a remote crossroads on the Laotian border. By posing a barrier to Vietminh movement between the two countries, French Gen[eral] Henri Navarre hoped to lure Ho's military commander, Vo Nguyen Giap, and his elusive forces into conventional 'meat-grinder' battles that would destroy Giap's army.[5]

So on 20 November 1953, at 1030 hours, the first of 65 C-47 Cargo planes flew over the rice paddy and elephant grass covered valley of Dienbienphu, disgorging its paratroopers into the morning calm. The drop was not unopposed, and the French paratroopers began receiving light mortar and recoilless rifle fire. The paras continued to consolidate their scattered troops and used close air support from orbiting B-26 bombers to suppress the enemy gunners.[6] The French quickly organized their defense setting up mutually supporting strongpoints on the low hills on the valley floor. Lacking the personnel and underestimating their enemy, the French rejected proposals to occupy the higher ridge lines that surrounded the valley. They planned to restrict the Vietminh's use of these ridge lines by aggressive patrolling, artillery support, and close air support. The decision to rely on aerial resupply and close air support to maintain the garrison and secure the ridge lines was a fatal flaw and would lead directly to their total defeat in less than six months.

To defend the outpost, the French Commander, Colonel Christian Marie de Castries, initially had over 5000 well trained and combat experienced troops. They were organized into the Headquarters, Airborne Divisional Element, consisting of five airborne and one infantry battalions, an engineer company, two artillery batteries with six 105mm howitzers each, a heavy mortar company with American 4.2" mortars, and several signal detachments. Through the winter, the force was augmented with an additional nine infantry and airborne units of battalion strength, four additional batteries of 105mm artillery and one section of 155mm guns. To supplement the ground defenses, four quad .50's and ten M24 "Chaffee" tanks were flown in, and the engineer contingent was increased to a reinforced battalion. The French main effort was to keep the airstrip open and the lines of communications between the strongpoints operational. All combined, the garrison had increased to 10,813 combat and support troops by the beginning of the siege, 13 March 1954.[7] Final strength during the siege would climb to exceed 13,000 troops.

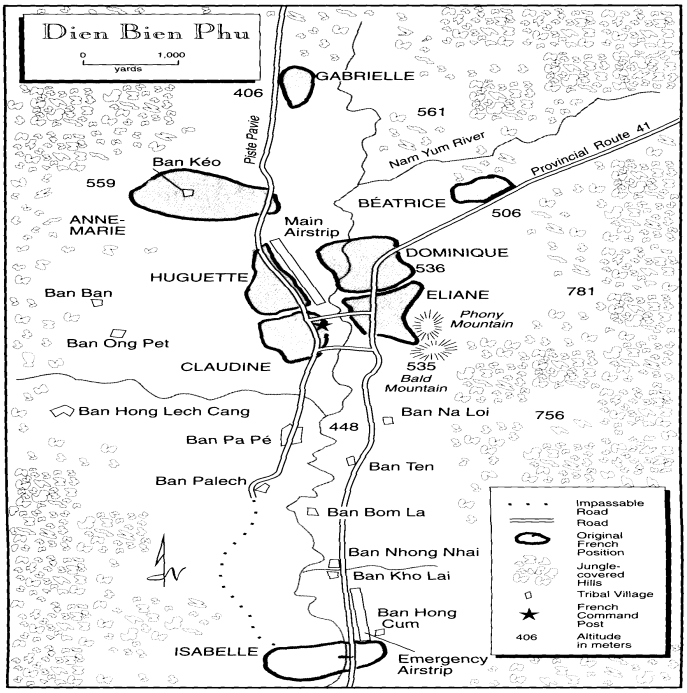

Figure 2. Dienbienphu Positions

To defend the garrison, the French deployed their forces in a series of mutually supportable strongpoints in a rough perimeter around the valley. The airstrip and force command center were at the center of the valley with strongpoints *HUGUETTE* and *CLAUDINE* to the immediate west of the airfield and *DOMINIQUE* and *ELAINE* to the immediate east. These four positions provided the close in protection of the headquarters as well as the airstrip. Additional strongpoints were established further from the airstrip to control what was thought to be key terrain in the valley and provide supporting fires for the other positions. *ISABELLE* was established 6km south of the command post at the southern end of the valley. The position sat astride Provincial Route 41 to block the high speed avenue of approach into the garrison as well as protect an emergency landing strip just to the north. It was here that the French located the bulk of their artillery in order to provided support to the entire garrison. *BEATRICE* was to the north of the command

post blocking approaches from the northeast via Route 41. *GABRIELLE* was located due north of the command post and was responsible for blocking mounted movement south on the Provincial Route 13 (Pavie Road) as well as infiltration attempts through the Nam Yum gully and river bed. *GABRIELLE* would witness some of the fiercest fighting of the siege and cause the highest casualty counts of the battle on both sides.[8] *ANNE-MARIE* completed the defensive positions and blocked any approach from hills to the northwest.

Since Dienbienphu was over 300km from Hanoi and approximately 500 km by road, much of that under Vietminh control, the principle means of resupply for the garrison would be by air. "Officially, the French could list 173 combat aircraft and close to eighty transport planes. In reality, mechanical failure, enemy action, normal repairs, engine-part delays, personnel losses, and illness cut the actual airborne figure by almost half."[9] The supply aircraft available to the French consisted primarily of the Douglas C-47 with a rated payload of three tons and a small number of Fairchild Packets with a seven ton maximum payload.[10] By the end of the siege, these aircraft would be flying around the clock in a futile attempt to provide the defenders the necessary supplies and munitions to hold off the communists. Most of the aircraft were built during WWII and had primitive navigation systems. Additionally, the aircraft were limited by weather conditions in the region, which was habitually plagued by low ceilings and fog. Further, since most of the aircraft were flying out of their air bases at Hanoi they were operating at the end of their range and were frequently grounded for weather between their base and the French garrison, not the conditions at Dienbienphu. Also, the airstrip was frequently flooded during the monsoon season leading to interruptions in the flow of supplies and personnel.

Enemy activity also closed the airstrip on numerous occasions, forcing the French to resort to air dropping as their primary means of resupply.

For combat air support the French relied on a mixed bag of aircraft from a variety of services. Fighter aircraft were provided by both the French Air Force and the Navy. The Air Force provided two squadrons of F8F Bearcats that initially operated a detachment from the airstrip at Dienbienphu. They were eventually withdrawn to Hanoi due to maintenance problems and frequent enemy mortar attacks. The Navy provided F6F Hellcats and F4U Corsairs flying from the carriers Arromanches and the Belleau Wood in the Tonkin Gulf. These were all WWII fighters that were converted to a ground support role. They were limited in both range and payload, and like the French transports, did not have all weather capabilities. Additionally, the communications equipment was not compatible with the ground forces, making close air coordination more difficult. The bombers available were also provided by the two services. The Air Force was flying converted B-26 Marauders while the Navy supplied PB4Y2. Both could carry several tons of bombs over long distances, but were routinely limited by the poor weather conditions between their bases at Hanoi and Dienbienphu.[11] Additionally, these aircraft were susceptible to enemy anti-aircraft flak, and by the end of March, the Vietminh had positioned AA weapons on all the airborne approaches to the valley.

The French plan from the beginning was to present to the Vietminh leadership a target too good to pass up, and once the Vietminh massed their troops to assault Dienbienphu, decimate them with air and artillery attack. Unfortunately, even during ideal flying conditions with all aircraft available to support the garrison, the French , good weather and surge all combined, the French could only muster 200 combat and administrative

sorties per day.[12] The low number of sorties was not sufficient to alter the outcome of events at Dienbienphu.

Vietminh Forces

Facing the French at Dienbienphu, was the revolutionary army of Ho Chi Minh. A collection of freedom fighters, communists, anti-imperialists, and impressed servants and coolies. Their commander, General Vo Nguyen Giap, saw Dienbienphu as a great opportunity to inflict heavy casualties on the French and possibly bring the war to an end. To accomplish this, he immediately sent forces to cut off Highways 41 and 13 limiting the French garrison to air supply only. The ground links to the garrison were cut by late December, about the same time that the last overland contact with the Dienbienphu garrison was made by the French. Additionally, he started moving supplies and heavy equipment to the region from supply bases in China. His plan was simple; isolate the garrison, seize the high ground, and slowly strangle the garrison into submission. To accomplish this plan, he had over 47,500 combat troops and another 300,000 support troops and coolies. For Giap's Vietminh, the "main supply line started at the Chinese border, took Provincial Route 13 to the Red River, and branched onto Provincial Route 41 to the main Vietminh supply depot of Tuan Giao, eighty kilometers northeast of Dienbienphu."[13] By the end of the build up, Giap's forces moved 144 heavy and medium artillery pieces, thirty-six anti-aircraft guns, several Katyushus rocket launchers and the ammunition needed for the upcoming assault.[14] Furthermore, Giap ordered his best combat divisions to the region. By the end of February 1954, elements of the 304th, 308th, 312th, and 316th Vietminh Infantry Divisions were in the hills surrounding the

French fortress. Additionally, the 148th Independent Infantry Regiment and the 351st Heavy Division were still on their way to the valley.

The Vietminh buildup around Dien Bien Phu was completed by early March and on the 13th, Giap launched the siege with a devastating artillery barrage. Within two days the two outposts, *GABRIELLE* and *BEATRICE* designed to protect the airfield from attack were in Vietminh hands. The French counterattacked which began two months of savage back and forth fighting. Every position was contested, and if lost, recaptured, only to be lost again. Initially, periodic truces were called to allow for the exchange of the dead and wounded, but as the fight drew on, this practice was suspended. The French responded by attempting to reinforce the garrison by aerial resupply and used airstrikes against the Vietminh artillery and antiaircraft positions. These strikes failed to disrupt the Vietminh artillery and the flow of supplies to Giap's forces.[15]

The Vietminh forces suffered in their early success. Their direct assaults of *BEATRICE* and *GABRIELLE* cost over 2500 killed and an indeterminate number of wounded.[16] Direct infantry assaults on *DOMINIQUE* and *ELIANE* were just as costly. Based on these devastating casualties, Giap adjusted his tactics and initiated siege techniques. Assaults were made at night under artillery and mortar support, and approach trenches were dug whenever feasible, to reduce the attackers exposure to the French direct and indirect fire. French air support was rendered almost useless by Vietminh camouflage techniques and their night time operations. The only tactic remaining to the French, was to fill in portions of the Vietminh trenches by day either with artillery, air attack, or by hand. To accomplish the later, the French suffered great losses at the hands of Vietminh snipers.

As the French situation worsened in Indochina, leaders in America took note. Discussions between American and French authorities centered around the feasibility of American air power being used to help break the Vietminh siege. Originally, the Americans offered 98 B-29 Superfortresses and Naval airstrikes from carriers in the 7th Fleet under the condition that it be a joint effort between the US, British, and the French. The British balked at getting involved and Eisenhower refused to act unilaterally. Furthermore, it was during these discussions, that Secretary of State John Foster Dulles allegedly suggested to the French Foreign Minister Bidault, that two American atomic weapons could be made available to the French.[17] Much debate has centered on the utility of air strikes at this juncture. Many have argued that no amount of air power would have saved Dienbienphu. Bernard Fall disagreed, summing up his evaluation by saying:

> When everything has been said about the many major and minor errors which led to the French debacle at Dien Bien Phu (the poorly planned counterattacks, the flimsily built field fortifications, the under-estimation of the enemy flak, and even the choice of the battle area itself) one single fact stands out above all others. *Air power on a more massive scale than was then available could not have changed the outcome of the Indochina War, but would have saved Dien Bien Phu.*[18]

Chairman of the Joint Chiefs, Admiral Arthur W. Radford, concurred with Fall's assessment. He had proposed a massive air strike for the relief of the garrison at Dienbienphu, but was opposed by eight congressional leaders who were consulted by the Eisenhower administration on 3 April 1954. As an interesting note, one of those Congressmen was Senator Lyndon B Johnson, who fourteen years later, would find himself in a similar situation as President Eisenhower. Unable to gain support at home in Congress or abroad with our allies, President Eisenhower disapproved the mission and had

Secretary Dulles inform the French that no American air strike would be forthcoming.[19] The French were on their own.

Just over a month later, with little ammunition, no artillery support, thousands of wounded and sick soldiers, the French surrendered to the Vietminh. All efforts to reinforce and save the garrison at Dienbienphu failed. The aerial resupply system delivered hundreds of tons of supplies right up until the end. "The French civilian pilots who had refused to fly the Dienbienphu runs on May 3, had returned to their airplanes and the supply run was flown at almost maximum strength - twenty-five C-119s out of thirty-six available that day and twenty-five out of twenty-nine C-47s. The results were correspondingly high, as a total of 196 tons of supplies were dropped on Dienbienphu."[20] Personnel were also dropped that morning, but it was a case of too little, too late. In the final analysis, Robert Pisor summed up the battle when he wrote:

> Against every prediction and in spite of all thoughtful analysis, Vietnamese General Vo Nguyen Giap had managed to deliver enormous quantities of shells and supplies to the distant battlefield, and to pound 13,000 French defenders into submission. His peasant army had out-generaled, out-supplied, and out-fought France's finest soldiers.[21]

Notes

[1]Bernard C. Nalty, *Air Power and the Fight for Khe Sanh*. (WASH DC: Office of the Air Force History, USAF, 1973), 18.

[2]Simpson, 102.

[3]Ibid., 5.

[4]Ibid., 8-9.

[5]Donald M. Snow and Dennis M. Drew, *From Lexington to Desert Storm: War and Politics in the American Experience* (New York: M.E. Sharpe Inc, 1994), 215.

[6]Simpson, 1-3.

[7]Bernard B. Fall, *Hell in Very Small Place* (Philadelphia, PA: J.B.Lippicott Company, 1967), 479-481.

[8]Ibid., 487.

[9]Simpson, 29.

[10]Nalty, 20.

Notes

[11]Fall, 485.
[12]Nalty, 19.
[13]Simpson, 32.
[14]Ibid., 35.
[15]Nalty, 18-19.
[16]Fall, 487.
[17]Ibid., 307.
[18]Ibid., 455.
[19]Lewy, 7.
[20]Fall, 371.
[21]Robert Pisor, *The End of the Line: the Siege of Khe Sanh* (New York: W.W. Norton & Company, 1982), 121.

Chapter 3

Khe Sanh

> *That Khe Sanh airstrip was a dangerous place to be. The North Vietnamese knew perfectly well it was vital to the defense and that if they could knock it out the Marines would be in deep peril. Planes were called mortar magnets or rocket bait.*
>
> —John Prados
> *Valley of Decision: the Siege of Khe Sanh*

Geography

Fourteen years later, during the Vietnam War, American Marines found themselves fighting the same enemy on a similar battleground, in similar conditions. The battle of Khe Sanh was named for the location of the main Marine Combat base which was located roughly halfway between the 16th and 17th parallels, north latitude in northwestern South Vietnam. It lay within striking distance of two enemy sanctuaries, Laos, 16 kilometers to the west, and the Demilitarized Zone, 25 km due north. The base was in the Quang Tri province which was in the I Tactical Corps Zone. It was one strong point in a series of positions along the DMZ designed to thwart North Vietnamese infiltration. The main base was on a plateau some 450m above sea level. A jungle road linked the airstrip to Highway 9 which ran roughly east-west from the Laotian border to where it intersected with Highway 1 in the vicinity of Dong Ha. West of the base were five important hills. From

east to west they were Hills 558, 861, 861A, 881 North and South. Also, due north from the base, were Hills 950 and 1015.[1]

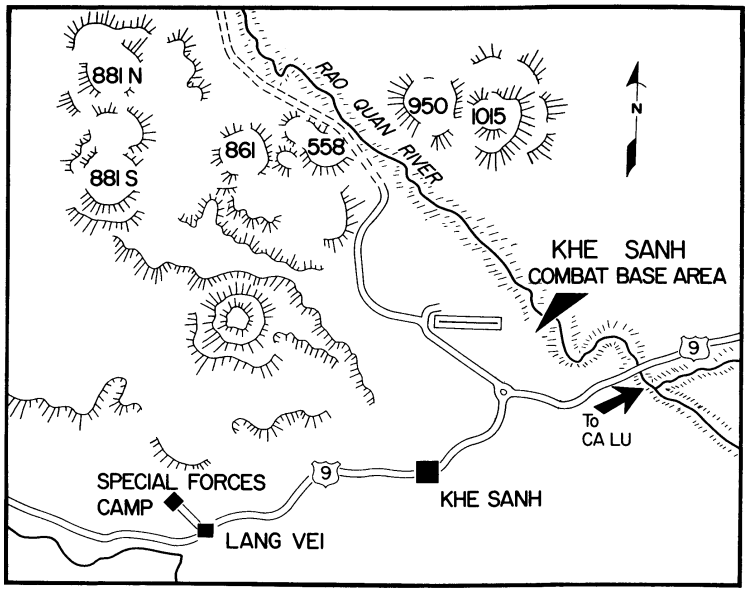

Figure 3. Khe Sanh Positions

The entire region was covered with dense jungle foliage which offered excellent cover and concealment for the enemy forces. John Prados, a reporter who covered the battle recalled that:

> On maps the triple canopy rain forest was a chaos of vegetation, the rolling hills a hell of elephant grass, taller than a man, with razor-sharp edges that cut into the skin of hands and arms and was loaded with bacteria that quickly festered into ugly and persistent sores. Movement was a strenuous exercise in controlled falling followed by pulling oneself up mud-slicked hillsides. The streams that looked like strips of tinsel from the air were raging, violent rapids full of cube shaped boulders five or six feet across. Often there were no banks at all, only slippery rocks or muck that oozed over the tops of boots. The daily patrols devoured one's strength. [2]

History

Khe Sanh started out as a Special Forces base camp in 1962. The Green Berets ran the camp to train and equip Civilian Irregular Defense Group forces, mostly hill tribesmen

and Laotians. The Green Berets worked out of the base for over 4 years annoying the NVA enough to provoke periodic mortar attacks, but never any ground assaults. The Marines moved into the base in October 1966, initially digging in a battalion. Early in 1967, a naval construction detachment, the SEABEES, modernized the runway, resurfacing the 1500 foot runway, adding a 2400 foot extension, and built support facilities on the base.

In April of 1967, a Marine reconnaissance patrol sent to the vicinity of Hill 861 encountered a NVA unit and carefully prepared positions which indicated an imminent attack on the Khe Sanh garrison. The 3rd Marine Regiment secured the airstrip and the surrounding hills and on 25 April 67, the first battalion of the Regiment began arriving. The 3d Marines began attacking the surrounding hills and within two weeks had cleared and secured Hills 861, 881N, and 881S.

Determining the threat to Khe Sanh diminished due to the 3d Marines success in the hill battles, the American command reduced forces at the garrison. They sent the 1/26th Marines in to relieve the two bloodied battalions of the 3d Marines and tasked the commander of the 26th Marines, Colonel Padley to occupy key terrain, aggressively patrol, and deny enemy access into the vital areas of the tactical area of operations. A difficult task for only a reinforced Marine battalion. To accomplish this, the Marines positioned rifle companies on each of Hill 881N, 881S, and 861. Additionally, a security detachment was deployed to Hill 950 to guard a radio relay site with the rest of the battalion positioned at the airbase. Torrential rains during the monsoon season greeted the 26th Marines, flooding the runway and forcing the C130s to suspend landing operations.

The rain and mud were so extensive, that for the next several months, only the lighter C7As could land and take off from the airstrip.

As May drew to a close and June began, the Marines reported an increase in sightings and enemy contacts. On 6 June the radio relay site on Hill 950 was hit by infantry and mortar attack. The next day, a patrol from Company B 1/26th Marines was hit by mortars and an NVA platoon sized element. As the number of contacts increased, 26th Marines 3d Battalion was redeployed to Khe Sanh arriving in force by 13 June. The Marines continued to make frequent contact with NVA patrols and came under ever more frequent mortar attacks. On 27 June, the Marines made contact with an NVA force estimated to be two infantry companies. This was the last major action in the Khe Sanh TAOR for several months. The number of sightings increased, and the mortar attacks grew more frequent, but the NVA appeared to be avoiding pitched battles with the Marines.[3]

In August 1967, the SEABEES again deployed to Khe Sanh to repair the runway. They removed the metal planking on the airstrip, laid a 6 inch layer of crushed rock, covered that with asphalt, and replaced the metal plating. After the repairs, the C130's and C123s were able to resume landing operations, but were still frequently unable to land, due to flooding and low visibility.[4]

In early December 1967, an enemy document was captured indicating the NVA planned to reenact a new Dienbienphu at the Marine base of Khe Sanh. The document's capture came amid growing reports of enemy units massing in the area around Khe Sanh.[5] "By capturing this important strategic outpost the North Vietnamese would have an almost unobstructed invasion route into the northernmost provinces, from where they could outflank American positions south of the DMZ. General Giap also hoped to

emulate his great Vietminh victory over the French at Dienbienphu, 14 years earlier.…This time though things would be different; the French had been short of tactical air support but the Americans had plenty standing by."[6]

Because of the tactical air support available to the Khe Sanh defenders, the NVA planned attack was not an altogether undesirable situation. Much like the French plan to draw the Vietminh into a conventional battle, American planners felt that the NVA could be tempted to mount an assault on the Marine base, making them very susceptible to American fire power. In addition, Westmoreland had established a study group to look at the feasibility of using tactical nuclear weapons in the region. The isolation, sparse population, and mountainous terrain made it ideal territory to utilize such weapons. Of course, the mere existence of this study group concerned politicians back in Washington, but shows just how far Westmoreland was willing to go, to fix and destroy Giap's forces.[7]

U.S. Forces

To accomplish his plan, Westmoreland directed that the Marine garrison at Khe Sanh be reinforced. Strength was increased from the current two Marine battalions at the base and in positions on the surrounding hill, to four American Marine and one South Vietnamese battalion. For artillery support the defenders could call on sixteen 175mm guns, sixteen 155mm guns, and eighteen 105mm howitzers positioned at Khe Sanh and other U.S. positions within range. In addition, the Marines had organic 4.2" and 81mm mortars for close indirect fire support.[8] "Also on hand for Khe Sanh's defense were six medium tanks that mounted 90mm guns, 10 Ontos anti-tank vehicles—each consisting of six 106mm recoilless rifle mounted on a tracked chassis—and four 'dusters' mounting

either two 40mm cannon or four .50 caliber machine guns. The latter, designed almost a generation before as anti-aircraft weapons, were prized for their murderous effect against ground troops."[9] The bulk of the troops occupied defensive positions on the main base to protect the airstrip. Two battalions manned the perimeter defenses while a third battalion(-) occupied an inner perimeter around the airfield, ammo dump, and command center. Two companies of Marines were also positioned in this inner perimeter as a reserve, capable of reinforcing any breach in the perimeter wire, or being air lifted to support one of the other friendly positions in the area. The Marines also positioned a company strength force with mortars on each of the hills they had fought so savagely for in April of the year before. Learning from the French at Dienbienphu, the Marines were determined to hold Hills 881, 861, 950, and 1015 so the enemy could not use the high ground to fire onto the main base and airstrip.[10] All told, the Americans put 6,000 Marines, sailors, and soldiers into the defenses at Khe Sanh to face an estimated, 20-30,000 NVA.

In defense of the position at Khe Sanh, the Americans could draw upon an armada of 2000 planes and 3300 helicopters. These aircraft, unlike their French flown equivalents possessed reliable communications and some had all weather capability. In addition, radar control beacons had been installed at both Khe Sanh and Con Thien to help guide the attack aircraft into the valley and allow them to drop their ordinance much closer to friendly positions in all types of weather and during limited visibility.[11] Initially, three attack aircraft were widely available to the Americans during Khe Sanh operations. The Republic F-105 and the McDonnell-Douglas F-4 Phantom were the primary USAF aircraft, while the Navy employed the F-4 and the McDonnell-Douglas A-4 Skyhawk.

None of these aircraft were well suited to providing close air support in the mountainous, jungle covered terrain of Vietnam, but were better than their French predecessors. Furthermore, "the F-105, the F-4, and the A-4 could not bomb in poor weather. Only the A-6 Intruder flown by the Navy and the Marines possessed an all-weather capability, and only two A-6 squadrons normally operated within the I Corps area."[12] Early in 1967, a request from Commander in Chief, Pacific Command to the Joint Chiefs of Staff, had requested additional A-6 type aircraft with all weather capability to be deployed to theater. By the time the siege of Khe Sanh was initiated however, only fifty-four were available.[13] To compensate for the lack of all weather capability, the Cluster Bomb Unit or CBU and napalm canisters were used extensively by the USN and USAF. Both types of munitions were well suited to the compartmented jungled terrain and because of their nature were not point weapons, but rather area weapons.[14]

The major contributor of air support during the siege was the B-52 Stratofortress. Designed to deliver nuclear weapons during the cold war, these huge four-engined bombers could carry and deliver twenty-seven tons of bombs on each sortie. When flown in a flight of three, their payload would devastate a mile square sector. Their initial use as a close air support platform or as an interdiction platform was initially met with much skepticism. Maxwell D. Taylor, the U.S. Ambassador to South Vietnam was cool to the ideal. In an exit interview he stated:

> At first I viewed it with great skepticism. I approved as ambassador, the 1st mission. I went over all the plans of how they were going to do it. I said, 'you're going to miss by a thousand miles, and you're going to have some great disasters from this use of the B-52.' Well I just didn't know how well the various techniques had improved for homing these planes onto ground targets and they've done a marvelous job.[15]

Prior to November 1967, the B-52 Arc Light strikes were not used in close proximity to friendly troops. A three kilometer safety buffer was established between the target and friendly positions An error during a routine bombing mission on 12 November 1967, led to a discovery that would have far reaching implications during the battle of Khe Sanh. A B52 dropped its payload approximately 1.4 KM away from a friendly position. No friendly troops or facilities were adversely effected, but numerous secondary explosions were observed. The NVA, aware of the original 3km safety distance, were taking advantage of it by positioning stores of munitions and equipment in close proximity to friendly positions to avoid the B-52 Arc Lights. From this point forward, the B-52s were allowed to fly their missions much closer to friendly positions and during Khe Sanh, routinely dropped their payloads within one kilometer of the Marine's forward positions. By the end of the siege, B-52s from the 3d Air Division had dropped almost 60,000 tons of munitions during 2548 sorties in support of the Marines. In contrast, it took the 7th Air Force fighters and the Naval and Marine Aviation a combined total of 22,106 sorties to deliver 39,000 tons of explosives at Khe Sanh.[16] The three and six ship arc light missions were instrumental in slowing the enemy's movement into the region and then disrupting them during the buildup and assault phases. Visual and photo reconnaissance showed that from 15 January to 31 March 68, the B-52 raids destroyed 274 and damaged 67 defensive positions; destroyed seventeen and damaged eight weapon positions; and killed or wounded an unestimatable number of enemy troops. Additionally, crews reported 1382 secondary explosions and 108 secondary fires.[17]

Also at the disposal of the Marines at Khe Sanh, that were not readily available to the French at Dienbienphu were helicopters. By 1967, rotary wing technology had advanced

to well beyond the old two seat medical evacuation choppers of the 50's. Helicopters pulled double duty by moving personnel and materials around the battlefield and serving as gun platforms. They proved invaluable in keeping the outposts supplied with ammunition and food, as well as evacuating the wounded. As the terrain around the main base and the outposts became infested with NVA infantry, ground resupply became out of the question. In September 1967, enemy activity closed the only road into the airbase at Khe Sanh and forced the American to conduct all resupply and evacuations by air. Resupplying the outposts solely by helicopter would have put a tremendous strain on the Marines in 1966, but by 1967 they benefited from the fielding of two relatively new helicopters. The CH46, soon to replace the old UH-34 as the Marine workhorse, and the CH-53, Sea Stallion, came on line. Operating from the I Corps log base and Headquarters at Dong Ha, these work horses would be responsible for keeping the outposts supplied with food and ammo and keep the all important artillery supplied with their munitions.[18]

The last part of the air support for Khe Sanh was the tactical airlift. The Marines could count on over 150 C-130 Hercules transports, each with an internal payload of twenty tons. To augment the C-130's, there were numerous C-123s and the De Havilland C7A. The C-123 had a payload of eight tons and the C-7A had a payload of three tons, therefore making the smallest aircraft available to the Americans equal to the largest one available to the French. The capabilities of the transports were also increased by technological advances in the air delivery systems.. The American aircraft had radar controlled delivery and extraction equipment that allowed supplies to be dropped right on target in all kinds of weather. As recorded in the 834th Air Division after action reports:

> This massive airlift support endeavor eventually was directly responsible for development and actual use of six new airdrop delivery systems; including ground controlled radar (GCA), airborne radar approach (ARA), adverse weather aerial delivery system (AWADS), ground radar aerial delivery system (GRADS), low altitude parachute extraction system (LAPES), and ground proximity extraction system (GPES)[19]

At Dienbienphu, the French suffered numerous casualties attempting to recover air bundles dropped between their positions and the Vietminh's. The French did not have the benefit of the systems described above further reducing the effectiveness of their aerial resupply efforts. These techniques coupled with the Marine Corps helicopters allowed the Americans to place deliveries within defensive perimeters, thus reducing casualties and increasing the viability of the outposts.

North Vietnamese Army

Facing this massive array of American fire power were the regular forces of the North Vietnamese Army. Commanded by Vo Nguyen Giap, the same commander who successfully defeated the French at Dienbienphu, the NVA forces had matured in the preceding fourteen years. They were now equipped with modern arms and equipment supplied mostly from the Chinese and the Soviets. The NVA fielded the better part of two divisions, the 324 and 324, and "by mid January, the 304th NVA Division had come across the border from Laos and joined the 325C outside of Khe Sanh. The 320th NVA Division next was identified, apparently poised for an attack against Camp Carroll."[20] (Marine position to the east of Khe Sanh) Additionally, the NVA deployed two separate Infantry Regiments, the 9th and the 5th. Each one of these formations were augmented with their own organic mortars and medium artillery. They also had a limited number of PT-76 amphibious tanks at their disposal, but due to American control of the air, the tanks

could only be moved at night, and were restricted to the primitive jungle trails. They were used with effectiveness, however, during the NVA assault of the SF camp at Lang Vei in February '67.[21]

The most significant deployment for the NVA were their light and medium anti-aircraft weapons. During the summer of '67, they deployed missiles into the DMZ just north of the Quang Tri province which forced the Americans to curtail unescorted flights into the region. Additionally, they used the frequent fog and low ceilings to position machine-guns on the approaches to the hilltop outposts.

The NVA plan was fairly straight forward and followed the successful format used at Dienbienphu. Their first step was the buildup of troops and supplies within striking distance of the Marine base. Step two was the isolation of the base by closing off all ground lines of communication between the outposts, cutting Route 9, and by knocking out the helicopter flights to the outposts. Once the bases were isolated, a coordinated effort would be made against all the positions within the combat position, reducing the American's ability to shuttle forces back and forth. Then a diversionary attack would be made against the SF camp at Lang Vei to both draw the Marines attention and troops away from the main target, Hill 881 followed by the combat base at Khe Sanh. The final assault would be conducted by the 325 NVA division.[22]

The NVA siege began on 21 January 1968, with a devastating artillery barrage followed by ground assaults against the Marine positions on the outposts and the main base. Holding on to the positions became a daily struggle. The NVA would attack through the night and the Marines would resupply and reinforce during the day.

> A typical resupply operation at the hill outposts went like the mission onto hill 881S on the morning of 22 Jan 68. As soon as the fog and early morning mist burned off, the first marine CH46 landed with its load of munitions, food, and water. As the craft settled onto the landing pad, two 120mm mortar rounds impacted on either side of the pad. This resupply mission although successful in delivering the supplies and evacuating wounded cost the Marine defenders five KIA and 15 WIA.[23]

Additionally, attacks on the airstrip continued making fixed wing resupply of the main base just as difficult. Mortar and rocket attacks on Khe Sanh damaged several aircraft including the destruction of two C-130's. As Robert Pisor recounted:

> The Marines at Khe Sanh would have to live by airlift, and it was already proving difficult. The few transports that tried landing in the chaos of January 21 had run gauntlets of enemy machine gun fire. North Vietnamese mortar shells searched the runways for taxiing planes and tried to catch helicopters on the ground.[24]

The NVA continued their pressure drawing the American command's attention and resources into the northern I Corps zone in support of Khe Sanh. On January 31, taking advantage of the annual Tet holiday, the NVA and the Viet Cong launched a country wide offensive against key American and South Vietnamese targets. As the American forces reacted to Tet, the NVA continued the pressure on the Marines at Khe Sanh. The SF camp at Lang Vei was overrun on 6-7 February and several C-130's attempting to land at Khe Sanh were damaged or destroyed. The struggle continued through most of February with the NVA continuing to assault the high ground to the north and west of the air strip. At the same time, they sustained their push against several of the other U.S. positions in the Quang Tri province. The Rock Pile, Lang Vei, Con Thien, and the air base at Dong Ha were all attacked, but none got the attention, both enemy and media, as much as Khe Sanh.[25]

The Khe Sanh siege lasted for nearly seventy days. Long supply lines, continuous air bombardment, and harsh weather conditions took their toll on the NVA. By the end of March, the NVA forces had reached the limit of their advance and began withdrawing forces back to the north. The NVA had paid dearly for this offensive. Casualty estimates for killed and wounded in the assaults exceeded 10,000, almost three times the losses suffered in the rest of the I Corps region. Coupled with the tremendous personnel losses of the Viet Cong and other NVA formations during Tet, Giap's forces needed to withdraw to reconstitute and reorganize. At the same time, General Westmoreland approved OPERATION PEGASUS, which included continuation of the air attacks, the B-52 strikes, and air assault operations to reopen Route 9. By 8 April, elements of the 7th Cavalry Regiment, 1st Cavalry Division, reached Khe Sanh. The siege was declared officially over.

Notes

[1]Nalty, 4-6.

[2]Prados & Stubbe, 4.

[3]Major Gary L.Telfer, USMC, and LTC Lane Rogers, USMC, *U.S. Marines in Vietnam, Fighting the North Vietnamese: 1967*. (Wash DC: History and Museums Divison, HQ, U.S. Marine Corps, 1984), 47.

[4]Prados & Stubbe, 25-37.

[5]Pisor, 123.

[6]Chil Chinnery, *Air War in Vietnam*. (New York: Exeter Books, 1987), 110-111.

[7]Lewy, 128..

[8]John Cash, John Albright, and Allan W. Sandstrum, *Seven Firefights in Vietnam*. (Toronto: Bantam Books, 1970), 124.

[9]Nalty, 16.

[10]Tefler & Rogers, 20.

[11]Nalty, 84.

[12]Mark Clodfelter, *The Limits of Air Power: the American Bombing of North Vietnam*. (New York: Collier Macmillan Publishers, 1989), 133.

[13]Message, from CINCPAC to JCS, (082145Z APR 67) p2.

[14]Raphael Littauer and Norman Uphoff, editors, *The Air War in Indochina*. (Boston: Beacon Press, 1972), 54.

Notes

[15]Maxwell D. Taylor, Gen(Ret). Oral History of the US Air Force. (Wash DC: HQ, USAF, 11 Jan 1972), 43.

[16]Nalty, 105.

[17]Khe Sanh, OPERATION NIAGARA, 22 Jan-31 Mar 68; Unit After Action Report. (Wash DC: Prepared by the Directorate, Tactical Evaluations Branch, HQ, PACAF, 13 Sep 68), 83.

[18]Telfer & Rogers, 205.

[19]*Unit History, 834th Air Division, 1 July 1967-30 Jun 1968: Tan Son Nhut Air Base Republic of Vietnam*. (Wash DC: USAF Historical Agency, 10 Oct 1968), 5.

[20]*Marines in Vietnam, 1954-1973*. (Wash DC: History and Museum Division, HQ, USMC, 1985), 102.

[21]Cash, Albright, and Sandstrum, 116-149.

[22]Telfer & Rogers, 36-7.

[23]Pisor, 125-6.

[24]Ibid., 125.

[25]Telfer & Rogers, 41.

Chapter 4

Battle Analysis

> *Since Giap would have to concentrate large numbers of troops in northwestern South Vietnam, where there were comparatively few civilians to inhibit the use of American air and artillery, Westmoreland felt free to make unstinting use of bombs and shells. Once his firepower had shattered the North Vietnamese divisions, the highly mobile US ground troops could exploit the situation. The Americans, it seemed, might well be able to do at Khe Sanh what the French had tried and failed to do at Dien Bien Phu.*
>
> —Bernard C. Nalty
> *Air Power and the Fight for Khe San*

All in all, the battle of Khe Sanh, was a success in the application of modern air power and support. During the 70 day siege over 8,120 tons of cargo were air dropped in 601 separate sorties. In addition 460 sorties were flown by fixed wing transports delivering 4,310 tons cargo and 2,676 personnel. and extracting 1,574 personnel of which 306 were wounded. Another 4,661 tons of cargo and an impressive 14,562 personnel were transported by Marine helicopters.[1] During the siege, Air Force and Marine aircraft delivered over 17,000 tons of supplies, averaging more than 244 tons per day. On their best days, the French were only able to deliver 200 tons and those rates could not be sustained. Moreover, the garrison at Dienbienphu, initially twice as large as the Marine contingent, required more supplies than the Marines.

And while the resupply effort was impressive, the air support totals were more so. The U.S. expended over 100,000 tons of bombs in support of Khe Sanh. The French totals were a paltry 13,000 tons. Moreover, the French, unable to attack the Vietminh forces around Dienbienphu, attempted to interdict them enroute to the French garrison, further dissipating their effort. The French 200 sorties per day of all aircraft did not come close to the American average of 300 combat sorties per day. Those rates continued even after OPERATION NIAGARA gave way to OPERATION PEGASUS, the follow on air campaign against the NVA in the I Corps tactical zone.[2] Furthermore, the Americans possessed the assets to simultaneously attack enemy troop concentrations and positions in contact with the Marines as well as fly interdiction missions against the NVA supply lines. The ability to simultaneously attack both the supply lines and the combat formations far exceeded the French effort fourteen years before.

In addition to the shear difference in numbers of aircraft available, were the type and the capabilities of the aircraft employed. As stated earlier the French garrison relied on a mixed bag of air force and naval aviation flying from bases in Hanoi and from carriers in the Gulf of Tonkin. The 300-400 kilometer distance forced the aircraft to fly at the very limit of their operational range, and did not allow for much loiter time once they arrived over Dienbienphu. In many cases, the amount of munitions loaded on the aircraft, had to be reduced to extend the aircraft's range.

The Americans at Khe Sanh did not have these constraints. First, the fighters operated out of a series of airstrips in Vietnam, Laos, and Thailand. Additionally, naval and Marine Corps aviation operated from carriers in the South China Sea and from bases at Da Nang. The close proximity of the launch bases allowed the supporting aircraft to

take off with more ordinance and remain on station longer. Furthermore, a system of air control was established whereby a single air manager, talking to the Forward Air Controllers could call upon numerous aircraft to support the ground troops.[3] And when conditions did not permit engagement by aircraft on station the FACs could request that other assets be scrambled. Describing an 8 Feb 67 NVA attack on the Marine outpost on Hill 861, the FAC reported:

> We wanted any propeller driven aircraft available, to remain close to the target at low altitudes. In our opinion the outpost was in the process of being overrun, and if we didn't get air, it would be. As reported by Hillsboro, the weather was unworkable for jets, and the proximity of friendly troops prevented Sky Spot directed strikes. Task Force Alpha at Nakhon Phanon AB, Thailand immediately scrambled a flight of three A-26s, call signs Nimrod 32A, 34A, and 35A, to aid the outpost. Three T-28 "Zorros" from Nakhon Phanom were already airborne and on armed reconnaissance in the STEEL TIGER area, and these were immediately diverted into NIAGARA by the ABCCC.[4]

In addition to the jet engined and propeller tactical aircraft, the Khe Sanh defenders could call upon first generation gunships. These converted C-119's and C-47's boasted .50 caliber machine guns, six miniguns or four 40mm Bofors anti-aircraft guns aligned along one side of the fuselage. They could orbit over a target for hours and provide direct fire support as well as provide on call illumination. The gunships were invaluable in the Marine's defense of the hilltop outposts.[5]

Close air support was not the only application of air power that made a difference at Khe Sanh. A technology not readily available to the defenders at Dienbienphu was the helicopter. The Marines used this asset to a great extent. Since the NVA controlled all the overland routes to the outposts, attempts to resupply by ground were abandoned early on during the mission. The only viable means of resupply, therefore, was aerial. Further,

even with advances in air drop accuracy, the most efficient means of aerial resupply for the small hilltop outposts were helicopters. Almost on a daily basis, helicopters operating out of Dong Ha and Khe Sanh airstrip would lift in much needed rations, munitions, and replacements and exfiltrate the seriously wounded for medical care. The Marine Corps helicopters alone moved over 14,560 personnel and 4,661 tons of cargo to and from the main base and the outposts. Compared to the totals for the fixed wing transports which delivered close to 4,310 tons of cargo, 2,676 personnel, and evacuated 1,574 personnel of which 306 were wounded it is easy to deduce the criticality of the helicopter in the Marine's success.[6] Without them, the hilltop outposts that protected the Khe Sanh airstrip could not have been sustained. And without the outposts, the NVA would control the high ground surrounding the main combat base and airstrip, making the situation similar to that of the French at Dienbienphu.

The defenders at Khe Sanh could also rely on overwhelming artillery support whereas the French were limited in both guns and ammunition available. At Khe Sanh, artillery was available from a series of positions outside of the main combat base. This allowed friendly fire support, even if the combat base was under enemy mortar and rocket attack as it routinely was. Guns from the Rockpile and other firebases had preplanned targets for the defensive positions at Khe Sanh registered and only had to elevate and traverse the guns to fire the missions. This support was especially critical at night and during poor weather conditions as these conditions had little effect on the artillery's ability to deliver responsive and accurate support. The French artillery at Dienbienphu was constantly under attack from both mortar and artillery fire, and because of its positioning, could not engage the Vietminh positions on the back side of the surrounding ridges.[7]

Other similarities existed between the two garrisons. First, both sieges occurred during the first three months of the year during the monsoon season. Secondly, both battles consisted largely of small unit assaults against prepared positions with supporting artillery and mortar fire. Next, both of the battles occurred at the end of a long supply line and both commander's knew at the beginning of the battle, that their forces would live or die based on their ability to resupply them. The last similarity was in the terrain.

Both valleys were surrounded by dominating terrain. At Dienbienphu, the French opted to garrison the lower hills within the valley and rely on air and artillery to deny the ridge lines to the enemy. At Khe Sanh, the Marines opted to secure the dominating hills with troops. As the Marine official history recounts:

> In order to control key terrain dominating infiltration routes the marines were ordered to take three hills held by the enemy. Despite heavy air and artillery support, the seizure of the peaks was costly and resembled the bloody hill battles in the last stages of the Korean War. At the end of what became known as the First Battle of Khe Sanh, the marines had lost 155 killed and 424 wounded; enemy losses were reported as 940 killed and 2 prisoners.[8]

As a further measure of how critical these battles were, the total friendly losses at Khe Sanh from December '67, until the site was abandoned in June '68, were 199 killed and 1600 wounded. In other words, because the Marines had paid the earlier price for seizing the high ground, their later losses, while still severe, were not as high as they could have been. The French at Dienbienphu, while inflicting an estimated 22,900 Vietminh casualties, lost more than 2250 killed, 6,400 wounded, and 3,700 missing and presumed dead; over 13,000 troops. Additionally approximately 6,500 were taken prisoner with the fall of the garrison, many never to be seen again.[9] While the company and battalion battles at Dienbienphu were to gain control of specific strong points, the Vietminh already

controlled the valley. At Khe Sanh, the battles were in the hills to determine who would win control of the valley. French reliance on air power to deny the enemy the high ground and keep the garrison supplied failed, while American air power allowed the Marines to retain their hilltop positions.

Lastly, both battles were fought for many of the same reasons. At Dienbienphu, General Navarre was trying to find a way to lure Giap's forces into a conventional battle where the full force of French fire power could be brought to bear. The isolated garrison was the lure, and the French air force and supporting artillery were to be the hammer. At Khe Sanh, the plan was much the same. Westmoreland, against the recommendations of several of his top aides and the American Ambassador elected to hold onto the outpost. Ambassador Taylor relayed his concern about the plan back to Washington when he stated:

> There's no place determined men can't take if they're willing to pay the price. I could see these guys tunneling up to the last 25 yards and then rushing the place. You could kill off 10,000 and they still would take it. I passed my concerns onto the JCS and the President, but the word came back from Westy, 'No, this is the right thing to do. Were in no danger. This is a killing area and we're killing them off. They're not going to get us.' In the end the Marines held the position and so Westmoreland was justified.[10]

Westmoreland wanted the combat base to anchor his DMZ defenses as well as to act as a launching point for operations into Laos to cut the Ho Chi Minh trail. Further, with Khe Sanh being a remote, lightly inhabited location, the full force of American fire power, especially air, could be brought to bear on the massed NVA forces. "Recalling the kind of savage U.S. aerial bombardment that in the autumn of 1967 had helped destroy the hostile

forces poised near Con Thien, another Marine outpost in Quang Tri province, the general decided to rely on air power rather than on large numbers of troops."[11]

Notes

[1] Nalty 58-9.
[2]Chinnery, 111.
[3]Khe Sanh, OPERATION NIAGARA, 22 Jan-31 Mar 68, 44-5.
[4]Ibid., 45.
[5]Ibid., 43-4
[6]Nalty, 58-9.
[7]Simpson, 67.
[8]Lewy, 67.
[9]Fall, 484.
[10]Oral History of Maxwell Taylor, 44-5.
[11]Nalty, 14-15.

Chapter 5

Conclusion

> *Khe Sanh was the beginning of the end for the communists in their military operations in Vietnam. And there is no question that air was responsible for the enemy setback at Khe Sanh.*
>
> —General George S. Brown, USAF
> Oral History of the US Air Force

We have seen that the French force at Dienbienphu was defeated due to their inability to sustain their force and deliver sufficient amounts of ordinance on the Vietminh positions to break the siege. Further, by depending on air power and artillery alone to deny the enemy the use of the high ground around their positions, the French sealed the fate of the garrison before the first shot was fired. Operating at the extreme of their range, the primitive French fighters and bombers were not able to alter the outcome of the battle. Vietminh tactics and air defense measures largely invalidated what little air power was brought to bear.

We have also seen that the French failed to sufficiently supply their force at Dienbienphu. Initially, all supplies were flown in using the limited airlift available. The limited internal payload and high maintenance requirements of the C47s, C119s and DeHavilland's made this air bridge tentative at best. Coupled with the lousy flying conditions between Hanoi and Dienbienphu, the French were doomed to failure from the

start. Once the Vietminh secured the high ground and positioned their anti-aircraft weapons on the landing approaches the French pilots were forced to run a gauntlet of heavy fire every time they attempted to land. Eventually, they abandoned all efforts to land and resorted to air drop as the primary means of aerial resupply. Their primitive air drop systems were dependent on perfect weather conditions and drop zones large enough to accommodate the haphazard landing patterns of the supply bundles. They did not have LAPES, or AWADS, or radar controlled parachutes. They were solely dependent on the garrison's ability to assess the prevailing winds, pass that assessment along to the resupply aircraft, and hope that the bundles fell to earth within the garrison's dwindling perimeters. By the end of the siege, more bundles were falling on Vietminh controlled territory more than within the French positions.[1] The ineffectiveness of this method of resupply is reflected in one of the last communiqués sent by Colonel De Castries in May 1954:

> Our provisions of all kinds are at their lowest—for fifteen days they have been reduced little by little—we don't have enough ammunition to stop enemy attacks or for harassing fire that must continue without pause—it appears that no effort is being made to remedy this situation—i'm told of the risk run by air crews when every man here runs infinitely greater risks. There cannot be two weights and measures—the night drops must begin at 20 hours instead of 23 hrs—the morning hours are lost because of fog and the planning for night drops, with the inevitable long intervals between aircraft permit only ridiculous results.—i absolutely need provisions in massive quantities—the very small state of the center of resistance, the fact that our elements on its edge can't leave their shelters without coming under fire from snipers and recoilless rifles means that more and more of the cases dropped are no longer retrievable—the lack of vehicles, the lack of coolies, oblige me to use extremely exhausted units for recovery purposes—the result is detestable. It also causes me losses—i can't even count on retrieving half of what is dropped, but the quantities that have been sent to me represent only a very small portion of what i've requested. This situation cannot go on —i insist, once more, on the broad authority that i've requested in the matter of citations—i have nothing to sustain the morale of my men who are being asked to accomplish superhuman efforts. I no longer dare to go see them with empty hands—end—[2]

To say that the French garrison was under-supplied would be an understatement. Overall, the French planned on being able to supply the garrison with the necessary materials for war and apply close air support to break the Vietminh formations. In fact neither occurred. The garrison was slowly starved and bled dry and the close air support was minimal and ineffective. Clearly, over reliance on air power to sustain the garrison led directly to the French defeat.

For the Americans at Khe Sanh, many of these same physical conditions existed, but the results of the battle were different. Khe Sanh, like its predecessor, Dienbienphu, was in an isolated region of the country surrounded by jungled hills and valleys. The airstrip at the combat base was dominated by nearby hills similar to Dienbienphu. Roads into Khe Sanh wound through enemy infested areas making ground resupply dangerous and costly. Therefore, the Khe Sanh defenders would live or die based on their ability to conduct aerial resupply. Further, continued control of the high ground surrounding the combat base would depend on the defenders ability to call on close air support and battlefield interdiction.

As discussed, the American defenders had an overwhelming number of aircraft available to provide close air support. The air support was critical to the Marine's ability to maintain their control of the hilltop outposts and the combat base at Khe Sanh. Air Force, Navy, and Marine tactical aircraft flew around the clock to deliver much needed ordinance in defense of the Marine positions. B52 bombers flew Arc Light missions to interdict NVA supply lines and destroy troop formations. Further, the Marines could call on gunships to provide direct fire support to their positions. The concentrated fire from the gunships had devastating effect on the NVA and enabled the Marines to survive

multiple NVA attacks. When weather or limited visibility impeded close air support, the Marines could call on artillery fire to fill the gap. This one-two punch of air support and artillery enabled the Marines to defeat the NVA attacks.

But more was involved in this siege other than the American ability to direct air and artillery onto NVA positions and formations. Clearly, the air power broke the momentum of the NVA attacks, but it was the American's ability to conduct aerial resupply that kept the Marines from suffering the same fate as the French. The defenders used the helicopter extensively to move much needed munitions, food, and water to the hilltop outposts. Further, those same helicopters were instrumental in delivering replacement personnel and evacuating the wounded. The replacements were critical in keeping the American positions fully manned and more importantly, keeping Marine morale high with the knowledge that if wounded they would be evacuated to medical facilities. The helicopter, capable of moving up to five tons of cargo directly to landing zones within the Marine perimeters were not available to the French. These rotary winged workhorses permitted the Americans to retain their hilltop positions, which enabled the combat base to withstand the NVA siege.

In addition to the helicopter, the Americans were able to conduct both air land and air drop operations to bring in bulk cargo to Khe Sanh and the outposts. Even after the NVA were successful in blowing up the ammunition supply point at the Khe Sanh airstrip, American airlift assets were capable of replacing the destroyed munitions with little or no effect. Further, as the weather and enemy activity made landing aircraft at Khe Sanh more difficult, advances in air drop techniques allowed aerial resupply bundles to be dropped from altitude and land exactly where the defenders wanted them to land. Modern day

techniques such as LAPES and AWADS were tested and perfected at Khe Sanh enabling the Marines to succeed where their French predecessors had failed.

It is clear, after comparing the similarities and differences of the two battles that at Khe Sanh, the application of overwhelming air power in support of the defenders was the primary reason for their success. While not denigrating the Marine's heroic and tenacious defense of the combat base, it is safe to say that without the close air support and aerial resupply received by the defenders, the NVA would have eventually secured the hilltop outposts around the Khe Sanh Combat Base which would have made retaining the airstrip much more difficult. Loss of those hilltop positions would have committed Khe Sanh to the same defeat as Dienbienphu.

Therefore, the battle of Khe Sanh served two major purposes, moral and military. It was a clear symbol of American determination to prevail in Vietnam while providing an anvil upon which American air power could hammer the enemy. By denying the North Vietnamese the ability to reenact their triumph at Dien Bien Phu, American forces demonstrated America's determination while inflicting the type of paralyzing casualties the French had hoped for more than a decade earlier.[3] Further, "the unparalleled, lavish use of firepower as a substitute for manpower would become an outstanding characteristic of U.S. military tactics in the War."[4]

The victory at Khe Sanh proved that a small force cut off from ground contact could be sustained and supported through the overwhelming application of air power. The French tried to accomplish this feat in 1954 at Dienbienphu with disastrous results, but by the end of the 60's both technology and tactics made it work and led directly to the Marine victory at Khe Sanh.

Notes

[1]Simpson, 152.
[2]Ibid.
[3]Nalty, 104-5.
[4]Robert M Kipp, "Counterinsurgency from 30,000 Feet: The B-52 in Vietnam," *Air University Review*. (Maxwell AFB, AL: xix, No. 2, Jan-Feb 1968), 17.

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